

With the largest city in the state Billings, Yellowstone Basin has the highest municipal and industrial water use in the four MWSI planning basins (Figure 9d). Irrigation diverts approximately 2.5 million acre feet annually to serve over 600,000 acres. Hydroelectric power generation uses almost 2.7 million acre feet at Yellowstone Dam on the Bighorn River near the Wyoming border. Montana FWP manages an instream flow right of 5.5 million acre feet for the Yellowstone River at Sidney.

INVENTORY OF CONSUMPTIVE WATER USE

Consumptive water use in Montana is influenced by a variety of factors including irrigated acreage, physically available water supplies, number of stock, and population. The water volume consumed by any use is less than the volume initially diverted, and the unused portion of water eventually returns to the system to be used by others. In Montana, basin-wide total consumption amounts to less than 30 percent of the diverted total, when considering all uses combined. Figures 10, 11a, 11b, 11c, and 11d show estimates of water consumed by type of use from information presented in individual planning basin documents. These estimates are of use for 2010 (2007 for irrigation) based on methodology described in individual basin plans.

WATER CONSUMED IN MONTANA ANNUAL ACRE FEET

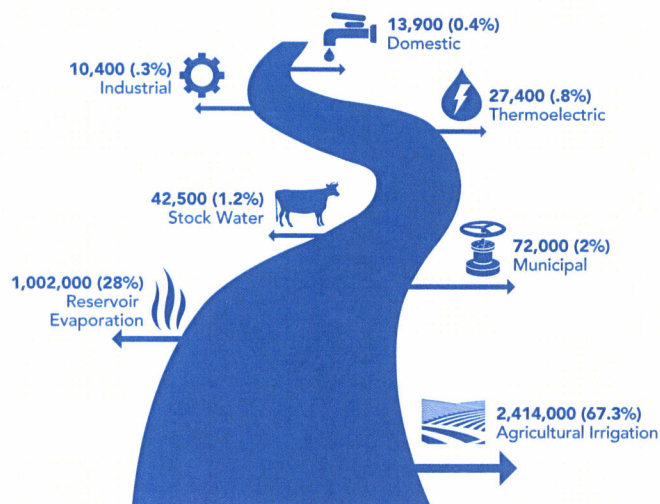


Figure 10: Water Consumption in Montana by Purpose

CLARK FORK/KOOTENAI RIVER BASIN CONSUMPTIVE WATER USE ANNUAL ACRE FEET

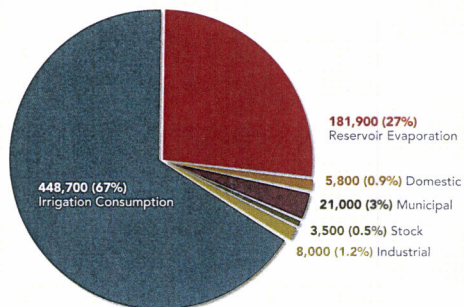


Figure 11a: Clark Fork/Kootenai River Basin Water Consumption

UPPER MISSOURI RIVER BASIN CONSUMPTIVE WATER USE ANNUAL ACRE FEET

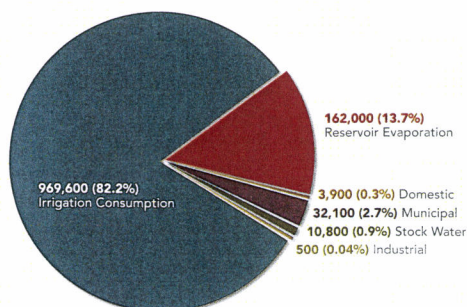


Figure 11b: Upper Missouri River Basin Water Consumption